

## ABSTRACT OF THE DISCLOSURE

A color changeable pixel comprises a first plate, a second plate and a third plate. The three plates are settled in parallel. The second plate is a deformable and reflective plate. An incident light from one side of the first plate is modulated and only specific  
5 frequency light reflects by the second plate. The frequency of the reflected light is related to the distance between the first plate and the second plate. The second plate shifts by the voltage added on the third plate to change the distance between the first plate and the second plate. Therefore, the frequency of the reflected light is altered.